1997 Governor's Award for Excellence in Pollution Prevention Recipients

Crane Division, Naval Surface Warfare Center, Crane
Crane's comprehensive pollution prevention program emphasizes planning, employee education, innovation and incentives. One of Crane's primary goals is to move the facility from a pollution control mindset to a pollution prevention ethic through its Corporate Environmental Policy Statement, environmental management system and educational tools and incentives for employees. Crane empowers employees to investigate pollution prevention opportunities in their operations and recognizes their accomplishments at a special pollution prevention awards ceremony each year. Working within a federal bureaucracy, Crane has developed an innovative activity-based cost accounting system that tracks hidden and direct costs associated with environmental compliance and hazardous materials management. Crane also carefully controls hazardous material procurement.

Delco Electronics Corporation, Kokomo
Delco Electronics substituted a flux material applied to circuit boards prior to soldering. The flux prepares the circuit board surface for the soldering process. The new material, made up of 97 percent deionized water and 3 percent dicarboxylic acid, has significantly reduced the facility's volatile organic compound air emissions and eliminated hazardous waste generation. Employees spent many hours with suppliers and customers to ensure the new material would meet the desired specifications. The new flux has become the standard for the company's worldwide operations**.**

Federal-Mogul Corporation, Frankfort
Federal-Mogul manufactures oil and grease seals, uni-pistons and rubber polymers. The Frankfort facility converted from two solvent-based adhesives to a single water-based material. Working with suppliers, Federal-Mogul developed this water-based material, which can withstand high temperatures and immersion in various oils and fluids. As a result, the company has reduced its volatile organic compound and hazardous air pollutant emissions by more than 200 tons a year.

Ford Motor Corp., Indianapolis
The Indianapolis Ford Plant, now known as Visteon, produces and assembles steering columns, gears and power steering pumps. Ford invested $2.6 million in dry-whirling cutting machines to replace its standard rough-grinding machines. The new machines require no coolant or lubricating oil. As a result, the Indianapolis plant eliminated its worst remaining source of air pollution - a potential of 18 tons of particulate emissions per year-and associated odor problems. Because the oil mist created a fire hazard, the new machines have greatly improved worker safety. Additionally, Ford no longer must dispose of 50,000 gallons of used oil per year.

Integrated Pest Management Partnership, Bloomington
The partnership among Monroe County Community School Corporation, Indiana University School of Public and Environmental Affairs, and the Purdue University Department of Entomology resulted in the reduction of pesticide application in Monroe County schools by 95 percent. Through integrated pest management, which relies on a combination of education and mechanical controls, the school system has saved money and decreased health risks. The partners are committed to educating other school systems throughout the state on these nontoxic methods of pest control.

I/N Tek and I/N Kote: Partnership Between Subsidiaries of Inland Steel Co. and Nippon Steel Corp., New Carlisle
I/N Tek and I/N Kote produce coiled sheet steel and zinc-coated steel for use in the automotive, appliance and furniture industries. Both companies installed magnetic separators in their cleaning solution tanks, which improved quality, minimized the use of toxic solution and reduced wastewater treatment plant discharges. The companies reduced consumption of the alkaline cleaning solution by more than 65,000 gallons and reduced water consumption by 1.33 million gallons. The payback on this project was one year, with the companies saving more than $200,000 on cleaning solution purchases.

Madison Chemical Co., Inc., Madison
Madison Chemical manufactures specialty chemicals used during pre-paint applications in metal and plastics fabrication and chemicals used by the food processing, paper making and transportation industries. The company received researched and developed three pollution prevention projects: the significant reduction of the use of sodium nitrite in its products, the elimination of suspected endocrine disrupting chemicals in its products, and the development of a product that eliminates the sulfuric acid pickles and zinc phosphate coating steps in a metal drawing operation. The company also won a Governor's Award in 1996 for developing a substitute for cadmium in the mechanical plating industry and replacing 1,1,1-trichloroethane with aqueous solutions.

National Steel Corporation, Midwest Division, Portage
National Steel's Midwest Division produces tin, chrome, galvanized and cold-rolled steel products for a variety of markets. National Steel installed a new tin-plating process that eliminates the use of cyanide and fluoride. This innovative technology uses a biodegradable plating bath solution and generates no hazardous wastes. Rather than disposing of leftover treated tin residue, the company now sells it to a recycler. This project has reduced hazardous waste generation by 1,200 tons per year.

Swiss Plywood Corp., Tell City
Swiss Plywood, a small Southern Indiana manufacturer of curios, display cabinets and furniture cabinets for pianos and organs, responded proactively to upcoming air pollution rules before the regulations required such changes. With assistance from the Indiana Clean Manufacturing Technology and Safe Materials Institute and Valspar Corporation, its coating supplier, Swiss Plywood converted to new coatings that significantly reduce xylene, toluene, methyl ethyl ketone and ethyl benzene emissions by nearly 20,000 pounds in 1996. The company continues to work with the Institute to transfer these results to other Indiana wood coating facilities.

Honorable Mention

BTR Antivibration Systems USA., Fort Wayne
Three BTR manufacturing facilities had projects including reduction of trichloroethylene vapor degreasing, development of CT-120 Link Assembly process (a non-volatile adhesive operation), and the replacement of a Powder Paint Coating line with an electrodeposition line.

Fairfield Manufacturing Company, Inc., Lafayette
By replacing a methylene chloride vapor degreaser with alkaline cleaner and spray washer, Fairfield eliminated almost 20 tons of methylene chloride emissions to the air.

Holiday Rambler, Monaco Coach Corporation, Wakarusa
Holiday Rambler and Utilimaster switched from HAP/VOC containing adhesive to the following three adhesives: water based, hot melt thermoplastics, hot melt thermosetting urethanes. This switch resulted in a virtual elimination of trichlorethylene emissions from the plant (approximately a 131 ton reduction in TCE) and a 5 ton reduction in other VOCs.

Rockwell Automation Reliance Electric, Madison

If you would like more information about this program, contact Bobbi Steiff at (800) 988-7901, ext. 35554 or (317) 233-5554.